

CLAIMS

What is claimed is:

- 1        1. A method for transmitting information over a wireless network,  
2 comprising:
  - 3            converting incoming wireless signals to intermediate frequency (IF)  
4 signals;
  - 5            transmitting the converted IF signals over a wired network;
  - 6            retrieving the transmitted IF signals from the wired network; and
  - 7            converting the retrieved IF signals to digital data that can be routed to a  
8 destination.
- 1        2. The method of claim 1, wherein the converting of the incoming  
2 wireless signals includes converting radio frequency (RF) signals to IF signals.
- 1        3. The method of claim 1, wherein the wired network includes  
2 alternating current (AC) wiring.
- 1        4. The method of claim 3, wherein the IF signals are baseband  
2 signals.
- 1        5. The method of claim 1, wherein the destination is at least one of a  
2 gateway and server.
- 1        6. An Access Point comprising:
  - 2            a radio frequency (RF) up/down converter to convert RF signals to  
3 intermediate frequency (IF) analog signals; and
  - 4            an IF module to transmit the IF analog signals over a wired  
5 communication link for subsequent conversion into digital data at the  
6 destination.
- 1        7. The Access Point of claim 6, wherein the wired communication  
2 link is alternating current (AC) electrical wiring.
- 1        8. The Access Point of claim 6, wherein the wired communication  
2 link is a twisted pair telephone line.
- 1        9. The Access Point of claim 6 further comprising an antenna to  
2 receive the RF signals.

1        10. An Access Point comprising:  
2            a first software module operating as an up/down converter to convert  
3            wireless signals to intermediate frequency (IF) analog signals; and  
4            a second software module operating in conjunction with the first  
5            software module to transmit the IF analog signals over a wired communication  
6            link for subsequent conversion into digital data at the destination.

1        11. The Access Point of claim 10, wherein the wired communication  
2            link is alternating current (AC) electrical wiring.

1        12. The Access Point of claim 10, wherein the wired communication  
2            link is a twisted pair telephone line.

1        13. The Access Point of claim 10 further comprising an antenna to  
2            receive the RF signals.

1        14. The Access Point of claim 10, wherein the up/down converter is a  
2            radio frequency (RF) up/down converter to convert RF signals into the IF  
3            analog signals.

1        15. An intermediary unit comprising:  
2            a connector coupled to a wired communication link;  
3            an intermediary frequency (IF) module to receive incoming IF signals  
4            over the wired communication link; and  
5            an IF-to-Digital converter to convert the incoming IF signals to digital  
6            data and format the digital data according to a format associated with a digital  
7            communication link.

1        16. The intermediary unit of claim 15, wherein the connector is an  
2            electrical plug based on the wired communication link being electrical wiring.

1        17. The intermediary unit of claim 15, wherein the connector is a  
2            telephone plug for insertion into a telephone jack based on the wired  
3            communication link being a telephone line.

1        18. The intermediary unit of claim 15, wherein the IF-to-Digital  
2            converter formats the digital data according to an Ethernet format based on the  
3            digital communication link being an Ethernet communication link.

1        19. An intermediary unit comprising:

2           a connector coupled to a wired communication link;  
3           an IF-to-Digital converter to receive incoming digital data sent over a  
4        digital communication link, and convert the incoming digital data to IF signals;  
5        and

6           an intermediary frequency (IF) module to send the IF signals over the  
7        wired communication link to a wired network.

1        20.      The intermediary unit of claim 19, wherein the connector is an  
2        electrical plug based on the wired communication link being electrical wiring.

1        21.      The intermediary unit of claim 19, wherein the connector is a  
2        telephone plug for insertion into a telephone jack based on the wired  
3        communication link being a telephone line.

1        22.      A method for transmitting information over a wireless network,  
2        comprising:

3           converting incoming digital data to intermediate frequency (IF) signals;  
4           transmitting the converted IF signals over a wired network;  
5           retrieving the transmitted IF signals from the wired network; and  
6           converting the retrieved IF signals to wireless signals that can be routed  
7        to a wireless unit.

1        23.      The method of claim 22, wherein the converting of the retrieved  
2        IF signals includes converting the retrieved IF signals to radio frequency (RF)  
3        signals.

1        24.      The method of claim 22, wherein the wired network includes  
2        alternating current (AC) wiring.